

### **Abstract**

A musical instrument that having a shaker that is adapted to house a plurality of impact particles. The instrument employs a spring mass system where the mean mass of the impact particles provide a force due to the accelerations as the impact the lower portion of the inner surface of the shaker member. Where the force of impact of the impact particles causes a compression of a shaker spring which provides an opposite force upon the impact particles while the spring is expanding and hence raises the mean mass of the impact particles away from the lower portion of the inner surface of the shaker. Thereby, the impact particles repeat the cycle of falling upon the lower surface and a damping oscillation motion is created. Where the impacts of the impact particles causes a desirable musical sound.